

REMARKS

1. Claim Amendments.

Claims 1 - 57 have been cancelled without prejudice to simplify the prosecution of this application.

Claim 58 has been amended to clarify that the invention is a method for preparing a dispensable sophorolipid compound and to make the preamble of the claim parallel to steps c) and d) of the claim. Claim 58 also has been amended to clarify that the method is a sequential series of steps for forming a natural mixture of lactonic and non-lactonic sophorolipids, then treating the natural mixture to form esters resulting in a sophorolipid compound having spermicidal and/or virucidal properties, and then making the compound dispensable. No new matter has been added.

Claims 59, 61 and 63 have been amended for clarity and antecedent basis issues. No new matter has been added.

Claims 60 and 62 have not been amended in this response.

Claims 64 - 67 have been cancelled without prejudice.

Claims 68 and 69 have been amended to depend from Claim 58 rather than from cancelled Claim 1. Claims 68 and 69 also have been amended to No new matter has been added.

Claims 70 – 74 have been cancelled without prejudice.

New Claim 75 is a combination of Claims 58, 59, 68, and 69, including the clarification that the method is a sequential series of steps for forming a natural mixture of lactonic and non-lactonic sophorolipids, then treating the natural mixture to form esters resulting in a sophorolipid compound having spermicidal and/or virucidal properties, and then making the compound dispensable. No new matter has been added.

New Claims 76 - 79 correspond to now Claims 60 – 63, but depend from Claim 75. No new matter has been added.

2. 35 USC 112 Rejections.

Claims 1-3, 5, 6, 28-30, 55, and 58-74 have been rejected under 35 USC 112.

Claims 1-3, 5, 6, 28-30, 55, 64-67, and 70-74 have been cancelled, thus obviating this rejection relative to these rejections.

Claim 58 has been amended to clarify that a dispensable sophorolipid *compound* is prepared to address the 35 USC 112, second paragraph, rejection to Claim 58, as well as to Claims 59-63, 68, and 69, which depend from or ultimately from Claim 58. Additionally, Applicant has attempted to amend Claim 58 to address the examiner's 35 USC 112, first paragraph, concerns.

New Claims 75-79 have been crafted to preempt these types of rejections.

3. 35 USC 102 Rejections.

Claims 58-63 have been rejected under 35 USC 102(b) as being anticipated by an article by Bisht et al., J. Org. Chem. 64, 780-789 (1999) (the Bisht reference). Applicant traverses this rejection. The Bisht reference does not disclose a method for formulating sophorolipids having spermicidal or virucidal properties – all that is mentioned regarding septic shock is a reference at the beginning of the article that glycolipids have been reported to be of interest in cancer treatment and antitumor cell activity, treatment of autoimmune disorders, septic shock activity, angiogenesis, and apoptosis induction, and not particular methods of producing spermicidal and/or virucidal sophorolipid compounds. Importantly, the Bisht reference discloses the synthesis of several new sophorolipid analogs, and the regioselectivity of certain sophorolipid analogs, but does not teach methods of producing the specific spermicidal and/or virucidal sophorolipids as disclosed in the present patent application.

Anticipation under 35 USC 102(b) requires “the disclosure in a prior art reference **each and every element** of the claimed invention.” *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir. 1986); *see also verdegall Bros. V. Union Oil Co. of California*, 814 F2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (“a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference”). This is just not the case here, as the Bisht reference does not disclose a method for formulating sophorolipid compounds having spermicidal and/or virucidal properties. In citing the Bisht reference, the examiner has at most shown that certain sophorolipids are known

in the art and can be acylated enzymatically. As such, Applicant requests that the examiner withdraw this rejection.

When compared to the present invention, the Bisht reference does not suggest that sophorolipid esters have spermicidal and/or antiviral properties or that sophorolipid esters can be formulated as a dispensable composition. Further, as the claims of the present patent application are not claiming the sophorolipid itself, but a method for making a dispensable sophorolipid having spermicidal and/or antiviral properties, the present invention is distinct from the Bisht reference. As such, Applicant requests that the examiner withdraw this ground for rejection. The absence of one element from the cited prior reference negates anticipation. See *Atlas Powder Co. v. E.I. du Pont de Nemours & Co.*, 224 USPQ2d 409 (Fed Cir. 1984). Anticipation was intended to apply in the limited situations in which one reference incorporates all the element of a claim in a subsequent invention because the non-obvious standard was intended to cover broader obvious leaps from a reference to a claim or from combined references to a claim. See *Titanium Metals Corp. v. Brenner*, 227 USPQ 773 (Fed. Cir. 1985).

Because the Bisht reference does not disclose each and every element of independent Claims 58 and 75, it cannot anticipate these claims. Further, as the remaining claims depend directly or ultimately from Claims 58 and 75, the Bisht reference cannot anticipate the remaining claims. For these reasons, Applicant requests that the Examiner find the pending claims allowable.

4. Provisional Double Patenting Rejection


Claims 58-74 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 1-3, 10, 11, 13, and 14 of copending Application No. 11/020,683. Applicant will address this issue upon an indication of allowability of Claims 58-74.

CONCLUSION

Applicant submits that the patent application now is in condition for allowance and issuance. If the examiner has any final concerns that can be addressed over the telephone, please have the examiner contact the below-signed patent lawyer of record to expedite the issuance of the patent.

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